








## WORK HISTORY

- ENGINEER**  **Beamery Ltd, London**  
FEB 17 - NOW
- Full stack engineering for Beamery, the world's most advanced sourcing and recruitment marketing platform, empowering companies to treat candidates like customers.
  - Feature work: Advanced UI for Elasticsearch filtering in AngularJS component architecture. Real time notifications through socket.io, RabbitMQ and Redis. Significant player in the road to CI as well as developing Beamery's own ESLint rules with serverside hooks.
  - QA: Established and owning end-to-end testing practices with Selenium and Cucumber. Boosting test coverage of public API and handling customer user issues directly.
  - Open Source: Took ownership of Node.js Apache Tika bridge library (many contributors) from The International Consortium of Investigative Journalists.
  - Running the first company-wide knowledge sharing session on Natural Language Processing.
  - Technical Debt: Moving to Node.js 8 and beyond.
- ENGINEER**  **Sony Interactive Entertainment Europe (PlayStation/SIE R&D West), London**  
MAR 16 - FEB 17
- Full stack engineering for PlayStation's best-in-class developer support platform.
  - Thought leader and individual responsibility for application's long term frontend strategy: build process, dependency management, migration of tightly coupled frontend/backend code to APIs and AngularJS clients, universal JavaScript and ES2015 transpiling.
  - Greenfield AWS event-driven architecture API solution architecture with Serverless, CloudFormation, Elasticsearch and SNS. Test-driven development with Mocha, Chai and SuperTest.
  - Leading agile planning and sprint reviews, presenting to stakeholders in Japan and America.
  - DevOps support: infrastructure-as-code Jenkins rehosting, building a new source-controlled and self-serviced development environment with Chef.
  - Successful "innovation time" visualisation project with Node.js, GitHub/Rally APIs, D3 and Grunt/Browserify/Babel.
- DEVELOPER**  **(NDA), London**  
JAN 15 - MAR 16
- Full stack JavaScript and PHP development visualising complex data sets in D3 and beyond for the world's leading agency groups.
  - Co-lead introduction of code reviews, git flow and regular knowledge sharing presentations.
- DATA SCIENTIST**  **Relative Insight Ltd, Lancaster**  
NOV 14 - OCT 15
- Developed Python web scrapers for high profile brands including Oxford University and Smirnoff. Published language normalisation algorithms for forums.
- INTERN**  **DataCentred Ltd, MediaCityUK, Manchester**  
JUN 14 - SEP 14
- Delivered as a pair a customer facing support app in Ruby on Rails and AngularJS within 3 months, reflecting internal JIRA tickets in real-time (still in production). Implemented LDAP support in popular open source project phpipam.
- DEVELOPER**  **NextWorldWeb Ltd, InfoLab21, Lancaster**  
JUN 13 - MAY 14
- Moved large legacy ecommerce systems to CakePHP, CS-Cart and WordPress. Automated WordPress theme creation from any site.

## EDUCATION

- 2012 — 2015  **2:1 Computer Science BSc (Hons), University of Lancaster, UK**
- Distributed Systems; AI; Advanced Internet & Mobile Applications; Operating Systems & Concurrency; Functional Programming (Erlang/Python); Digital Systems (Pure Mathematics, Assembly, Compilers). First Year German Studies.

## PROFILE









- LEADERSHIP**  **The Computer Science Society:** President (Lancaster, 2014 — 2015)  
 **InterTech LGBT+ Diversity Forum:** Organiser (London, 2014 — present)

**LANGUAGES**  **English:** Native  **German:** Fluent  **Spanish:** Learning

## COMMERCIAL VENTURES

<b>DELTA REACT LTD</b> MAR 2016 - NOW	<ul style="list-style-type: none"><li>• [<a href="https://foreverclient.co">https://foreverclient.co</a>] Founder of Epsilon Data Ltd offshoot "Forever": "a simple and proven system to boost client engagement and shape long term strategy in a single step".</li><li>• End-to-end solution built on existing insight platform enhanced with Twilio (SMS) and SendGrid integrations, hand-trained "Natural Language to Relationship Health" algorithms on top of Apache OpenNLP and MonkeyLearn.</li></ul>
<b>VARIABLE OUTCOMES LTD</b> JAN 2015 - NOW	<ul style="list-style-type: none"><li>• [<a href="https://epsilon-data.co.uk">https://epsilon-data.co.uk</a>] Technical co-founder of profitable startup in the data science and automated marketing space.</li><li>• Lead generation by finding Twitter conversations and replying intelligently through brands' Twitter handles. Test-driven strategy to avoid spambot-like behaviour.</li><li>• WYSIWYG landing pages with user tracking from automated tweets through to final website via client-side SDK.</li><li>• "Deep Profiles" technology by automatically associating user profiles between LinkedIn, Twitter and Facebook for demographic clustering. PhantomJS crawlers running in parallel.</li><li>• One-to-one client mentoring with the UK's leading ethical tourism charity.</li><li>• Built API-first strictly RESTful, microservice-based Node.js insight platform with single step/0 downtime DigitalOcean deployments through CloudFlare API integration.</li><li>• Failsafe API integrations with Twitter, Google Images, Mapbox, GeoNames and Genderize.io.</li><li>• 100% self-service and responsive "Client Portal" written from scratch with AngularJS consuming insight platform APIs.</li><li>• 100% self-service attractive report generation with impress.js, wkhtmltopdf and Chartist. 2-year old codebase transitioned to modern Browserify, Babel and Sass build pipeline.</li></ul>
<b>DARK FLOW</b> 2011-2012	<ul style="list-style-type: none"><li>• [<a href="https://youtube.com/watch?v=yY3QpVo25lw">https://youtube.com/watch?v=yY3QpVo25lw</a>] Lead developer of true cross platform game maker in a team of 5.</li><li>• Implemented Mac/Windows/Linux game support through Mono/.NET bytecode runner, browser and mobile support through native JavaScript generation.</li><li>• Responsible for hosting provider partnerships and sales insights.</li></ul>
<b>DS GAME MAKER</b> 2007-2011	<ul style="list-style-type: none"><li>• [<a href="http://gamemakerblog.com/2010/09/22/ds/">http://gamemakerblog.com/2010/09/22/ds/</a>] Developer of famous Nintendo DS homebrew IDE written in .NET and C.</li><li>• Sold over 1,500 serial codes and 350 physical 'Homebrew Kits' by age 17.</li><li>• Adopted at American summer camps and site licenses sold worldwide. International logistics work with Hong Kong and support in German and Dutch.</li></ul>

## HACKATHONS, CONFERENCES & TALKS

JUL 17	 <b>#HackingTalent</b>	First Prize. Suggesting top candidates for hard-to-fill vacancies by classifying text descriptions to form structured vacancy data from job descriptions alone. Team of 3.
JUL 17	 <b>AngelHack London</b>	Personal assistant Chrome extension querying local browser history to promote mindfulness through conversation. Frameworkless Polymer/Web Components/Webpack frontend; Elasticsearch and Node.js backend with multiple API providers. Team of 4.
SEP 16	 <b>Capco Hackathon with Monzo and Loqr</b>	First Prize. Clustering spend data from Monzo's API to create financial personality profiles delivered by RESTful API (Node.js/restify). Tinder-like profile matching client (AngularJS, ES2015). Deployed to DigitalOcean within ~5 hours' keyboard time. Team of 3.
FEB 16	 <b>PHP UK Hackathon</b>	Second Prize. Real time websocket powered Twitter sentiment analysis "topic battle" with MonkeyLearn, Pusher, AngularJS and HTML5 canvas tag clouds.
NOV 14	 <b>Global Startup Weekend 2014</b>	First Prize. One line JavaScript plug-in for reputation based comments, quantifying personality to eliminate on-line trolls. Team of 4.
NOV 14	 <b>Nintendo DS Homebrew, 2014 Edition</b>	Speaker at DunDDD conference, University of Dundee. "Adventures in the retro Homebrew Scene" and live demo of writing Nintendo DS homebrew.
MAR 14	 <b>Hack Smart Streets 2014 (University of Lancaster)</b>	'Most Commercially Viable' Prize. API for public bodies to detect decaying street furniture from crowdsourced imagery using ffmpeg and .NET image analysis. Team of 4.
AUG 13	 <b>LeedsHack 2013</b>	First Prize. Mobile AR game 'Pacman City' on Google Maps. Team of 3.